

tip, thus giving an overall rufous-brown effect. Feet were greyish-brown. This is the largest recorded specimen of *P. caniceps* so far.

The specimen is deposited at the national collections, Zoological Survey of India (Registration No. is ZSI 26087).

#### ACKNOWLEDGEMENTS

The visit to Mechuka was a part of the Important Bird

Area programme coordinated by the Bombay Natural History Society and I thank them. I also thank Bikul Goswami (who was with me at Mechuka), Mamata Riba (Additional Deputy Commissioner, Mechuka), Ratul Talukdar and Hakim (both of the Rhino Foundation for Nature in NE India), and the anonymous owner (hunter) of the specimen belonging to the Tagin tribe for agreeing to send it to the Zoological Survey of India (ZSI). At the ZSI, I thank Dr. J.K. De, Scientist-'D' and Supriya Nandi.

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### 3. THE NORTHERNMOST RANGE OF GAUR *BOS GAURUS* H. SMITH AND WILD WATER BUFFALO *BUBALUS ARNEE* KERR

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The Gaur *Bos gaurus* H. Smith and Wild Water Buffalo *Bubalus arnee* (= *bubalis*) Kerr are large bovids; their current range is confined to mainland South and South-east Asia (Corbet and Hill 1992; Choudhury 2002, 2010). While the Gaur is more widespread and still has large populations in India, Bhutan, Myanmar, Thailand, Cambodia, Vietnam and Peninsular Malaysia (small populations in Nepal, China and Bangladesh), the Wild Water Buffalo is found in relatively small numbers, that too highly fragmented, in India, Nepal, Bhutan, Thailand and Cambodia (doubtfully in Myanmar) (Schaller 1967; Lekagul and McNeely 1977; Prater 1980; Corbet and Hill 1992; Choudhury 1994a,b, 2002, 2010; Groves 1996; IUCN 2009) (Fig. 1). In this short note, I discuss the northern limit of distribution of these bovids. Interestingly, the northernmost range limit of Gaur and Wild Water Buffalo is similar.

The Gaur ranges from the southernmost tip of India towards northern Western Ghats (well inside Maharashtra), to the plateau of Central India, Himalayan foothills from Nepal eastwards to Vietnam and up to Peninsular Malaysia (Dunbar Brander 1923; Hubback 1937; Gee 1952; Daniel

and Grubb 1966; Choudhury 1994a, 2002; Duckworth *et al.* 1999). In South-east Asia, the northernmost populations are in southern China (Yunnan province) (c. 25° 00' N) (Smith and Xie 2008). Their range map indicates that their western limit was dry desert (during Indus Valley civilization it was apparently further west as Gaur appears in the seals of that period), to the south and east is the sea; while towards north are the high snow-capped mountains. The highest elevation where the Gaur has been recorded during this study was above 2,700 m in summer (near Chaku, Eagle Nest Wildlife Sanctuary), West Kameng district, Arunachal Pradesh. The Himalayas are above 5,000 m elevation and act as an impenetrable barrier. East of the Himalaya, are the Mishmi Hills, Gaoligong Shan, and other such high mountains, which have also prevented its northward spread. The northernmost area of its range lies in the Mishmi Hills, Lower Dibang Valley district, Arunachal Pradesh (Choudhury 1999); however, subsequent research in East and Upper Siang districts of Arunachal Pradesh revealed that it occurs farther north. The northernmost area of distribution of the Gaur is around Geku (c. 28° 30' N) in Upper Siang district. Historically, it perhaps

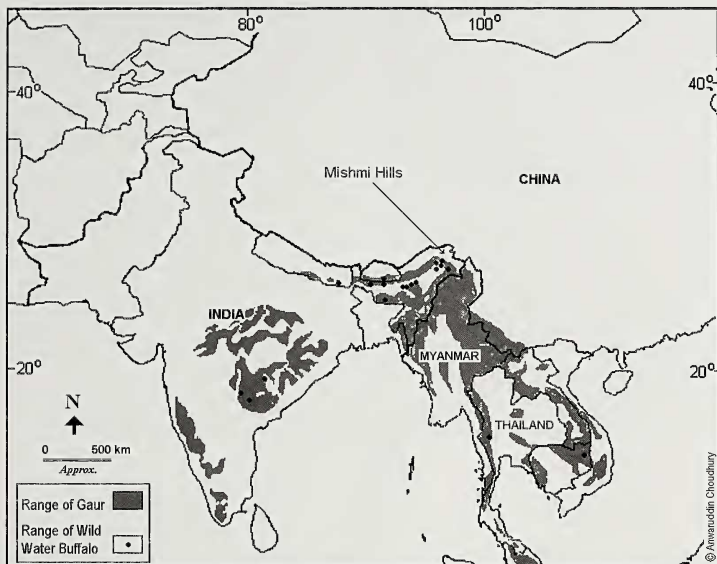


Fig. 1: Distribution of Gaur and Wild Water Buffalo showing their northernmost limit in Mishmi Hills, India (source of distribution are Choudhury [2002, 2010], Francis [2008] and Smith & Xie [2008])

occurred farther north of Yinkiyong (c. 28° 40' N) where human settlements and cultivations are present.

The Wild Water Buffalo is largely a dweller of flat plains or to some extent undulating country with smaller plains. The limiting factors or the zoogeographic barriers, however, seem almost similar to that of the Gaur. The Wild Water Buffalo might have extended farther west along the coastal plains (Choudhury 2010). The historic northerly animals were those occurring in the *terai* of northwestern Uttar Pradesh and western Nepal (Babur 1529; Fazl 1590). With the extinction of wild water buffaloes in those areas,

the current northerly animals are those occurring in the plains just south of Mishmi Hills in the plains of the Dibang river (Choudhury 1998). The northernmost site where individuals were observed is Nizamghat (28° 18' N) where the Dibang river spreads out on the plains in Lower Dibang Valley district, Arunachal Pradesh. It is possible that a few buffaloes move farther north along the river or slopes for short distances.

It is an interesting coincidence that two of the largest bovids on earth have their northernmost range in the Mishmi Hills area of Arunachal Pradesh in north-east India.

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#### 4. EASTERNMOST LIMIT OF THE RANGE OF BLACKBUCK *ANTILOPE CERVICAPRA* (L.) WITH HISTORIC RECORDS FROM ASSAM AND NORTH BENGAL, INDIA

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The Blackbuck *Antelope cervicapra* (L.) is an endemic antelope of the Indian subcontinent (Prater 1980; Menon 2003). It occurs in the grasslands and grass-scrub covered countryside amidst cultivations. Outside India, small numbers occur in Nepal and Pakistan (Roberts 1997). There is historic record from western Bangladesh (Asmat 2001). Being an animal of relatively drier opener plains, it apparently does not occur in high rainfall and densely forested areas of the Western Ghats, North-east India and the Himalayas.

Currently, the eastern range of the Blackbuck includes parts of Orissa and Jharkhand, may be lower parts of West Bengal too. Tikadar (1983) mentioned Chilka lake in Orissa as its eastern limit. Prater (1980) did not mention anything specific about its eastern range. Corbet and Hill (1992) mentioned West Bengal as the eastern range. Lydekker (1907) mentioned that Blackbuck extends to 'Lower Assam', but did not mention any specific locality. I here report the past occurrence of the Blackbuck, as far east as Assam, and also fix its easternmost limit of distribution.

The 'Raja' (landlord) of Gouripur, late Prabhat Chandra Barua in Assam's Dhubri district had shot a number of Blackbucks with his royal friends at different places, including

Dholpur in present Rajasthan. He maintained his hunting records meticulously, most of which are still in good condition. In his records, there is a mention of shooting a Blackbuck from Jhalupara, near Sonahat (south-west of Golokganj near present India-Bangladesh border) in Assam's Dhubri district on January 13, 1915 (c. 26° 6' N; 89° 48' E). There were also past records from the banks of Manas river in western Assam by Pollock while a male obtained by F. Jenkins has been mentioned from 'Doon of Assam', which were mentioned by Sclater (1891). The 'Doon' of Assam is the *duar* region of undivided Goalpara district (now falling in Kokrajhar and Chirang districts). The banks of Manas (by Pollock in Sclater 1891) are likely to be somewhere in the Panbari range of Manas National Park or just south of it in present Chirang district.

In northern West Bengal, although Agrawal *et al.* (1992) did not mention any past occurrence, there are several records in the hunting accounts of 1908 of the Maharajah of Cooch Behar. This excellent hunting report not only provided important easterly records of Blackbuck, but also records of several other species. The Maharaja and his hunting parties, which also comprised of top British officials, had their